

INPUT SET: S18699.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

SEQUENCE LISTING

RECEIVED
OCT 16 1997
GROUP 1800

(1) General Information:

(i) APPLICANT: Bradfield, Christopher A.
Dolwick, Kristin M.
Carver, Lucy A.

(ii) TITLE OF INVENTION: Ah Receptor cDNAs and Genetically Engineered Cells for Detecting Agonists to the Ah Receptor

(iii) NUMBER OF SEQUENCES: 36

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: Tilton, Fallon, Lungmus & Chestnut
(B) STREET: 100 South Wacker Drive, Suite 960
(C) CITY: Chicago
(D) STATE: Illinois
(E) COUNTRY: USA
(F) ZIP: 60606-4002

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: US
(B) FILING DATE:
(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Tilton, Timothy L.
(B) REGISTRATION NUMBER: 16,926
(C) REFERENCE/DOCKET NUMBER: NU-9207-CIP

(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: (312)-456-8000
(B) TELEFAX: (312)-456-7776

(2) INFORMATION FOR SEQ ID NO:1:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 3207 base pairs

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402DATE: 07/03/97
TIME: 19:11:17

INPUT SET: S18699.raw

47 (B) TYPE: nucleic acid
48 (C) STRANDEDNESS: double
49 (D) TOPOLOGY: unknown
50
51 (ii) MOLECULE TYPE: cDNA
52
53
54 (ix) FEATURE:
55 (A) NAME/KEY: CDS
56 (B) LOCATION: 1..2415
57
58
59 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
60
61 ATG AGC AGC GGC GCC AAC ATC ACC TAT GCC AGC CGC AAG CGG CGC AAG 48
62 Met Ser Ser Gly Ala Asn Ile Thr Tyr Ala Ser Arg Lys Arg Arg Lys
63 1 5 10 15
64
65 CCG GTG CAG AAA ACA GTA AAG CCC ATC CCC GCT GAA GGA ATT AAG TCA 96
66 Pro Val Gln Lys Thr Val Lys Pro Ile Pro Ala Glu Gly Ile Lys Ser
67 20 25 30
68
69 AAT CCT TCT AAG CGA CAC AGA GAC CGG CTG AAC ACA GAG TTA GAC CGC 144
70 Asn Pro Ser Lys Arg His Arg Asp Arg Leu Asn Thr Glu Leu Asp Arg
71 35 40 45
72
73 CTG GCC AGC CTG CTG CCC TTC CCG CAA GAT GTT ATT AAT AAG CTG GAC 192
74 Leu Ala Ser Leu Leu Pro Phe Pro Gln Asp Val Ile Asn Lys Leu Asp
75 50 55 60
76
77 AAA CTC TCT GTT CTT AGG CTC AGC GTC ACG TAC CTG AGG GCC AAG AGC 240
78 Lys Leu Ser Val Leu Arg Leu Ser Val Thr Tyr Leu Arg Ala Lys Ser
79 65 70 75 80
80
81 TTC TTT GAT GTT GCA TTA AAG TCC ACC CCT GCT GAC AGA AAT GGA GGC 288
82 Phe Phe Asp Val Ala Leu Lys Ser Thr Pro Ala Asp Arg Asn Gly Gly
83 85 90 95
84
85 CAG GAC CAG TGT AGA GCA CAA ATC AGA GAC TGG CAG GAT TTG CAA GAA 336
86 Gln Asp Gln Cys Arg Ala Gln Ile Arg Asp Trp Gln Asp Leu Gln Glu
87 100 105 110
88
89 GGA GAG TTC TTG TTA CAG GCG CTG AAT GGC TTT GTG CTG GTT GTC ACA 384
90 Gly Glu Phe Leu Leu Gln Ala Leu Asn Gly Phe Val Leu Val Val Thr
91 115 120 125
92
93 GCA GAT GCC TTG GTC TTC TAT GCT TCC TCC ACT ATC CAA GAT TAC CTG 432
94 Ala Asp Ala Leu Val Phe Tyr Ala Ser Ser Thr Ile Gln Asp Tyr Leu
95 130 135 140
96
97 GGC TTT CAG CAG TCT GAT GTC ATC CAT CAG AGC GTA TAT GAG CTC ATC 480
98 Gly Phe Gln Gln Ser Asp Val Ile His Gln Ser Val Tyr Glu Leu Ile
99 145 150 155 160

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402

DATE: 07/03/97
 TIME: 19:11:20

INPUT SET: SI8699.raw

100	CAT ACA GAA GAC CGG GCG GAA TTC CAG CGC CAG CTT CAC TGG GCT CTA	528
101	His Thr Glu Asp Arg Ala Glu Phe Gln Arg Gln Leu His Trp Ala Leu	
102	165 170 175	
103		
104		
105	AAC CCA GAC TCT GCA CAA GGA GTG GAC GAA GCC CAT GGC CCT CCA CAG	576
106	Asn Pro Asp Ser Ala Gln Gly Val Asp Glu Ala His Gly Pro Pro Gln	
107	180 185 190	
108		
109	GCA GCA GTC TAT TAT ACC CCA GAC CAG CTT CCT CCA GAG AAC GCT TCT	624
110	Ala Ala Val Tyr Tyr Thr Pro Asp Gln Leu Pro Pro Glu Asn Ala Ser	
111	195 200 205	
112		
113	TTC ATG GAG AGG TGC TTC AGG TGC CGG CTG AGG TGC CTG CTG GAT AAT	672
114	Phe Met Glu Arg Cys Phe Arg Cys Arg Leu Arg Cys Leu Leu Asp Asn	
115	210 215 220	
116		
117	TCA TCT GGT TTT CTG GCA ATG AAT TTC CAA GGG AGG TTA AAG TAT CTT	720
118	Ser Ser Gly Phe Leu Ala Met Asn Phe Gln Gly Arg Leu Lys Tyr Leu	
119	225 230 235 240	
120		
121	CAT GGA CAG AAC AAG AAA GGG AAG GAC GGA GCG CTG CTT CCT CCA CAA	768
122	His Gly Gln Asn Lys Lys Gly Lys Asp Gly Ala Leu Leu Pro Pro Gln	
123	245 250 255	
124		
125	CTG GCT TTG TTT GCA ATA GCT ACT CCA CTT CAG CCA CCC TCC ATC CTG	816
126	Leu Ala Leu Phe Ala Ile Ala Thr Pro Leu Gln Pro Pro Ser Ile Leu	
127	260 265 270	
128		
129	GAA ATT CGA ACC AAA AAC TTC ATC TTC AGG ACC AAA CAC AAG CTA GAC	864
130	Glu Ile Arg Thr Lys Asn Phe Ile Phe Arg Thr Lys His Lys Leu Asp	
131	275 280 285	
132		
133	TTC ACA CCT ATT GGT TGT GAT GCC AAA GGG CAG CTT ATT CTG GGC TAT	912
134	Phe Thr Pro Ile Gly Cys Asp Ala Lys Gly Gln Leu Ile Leu Gly Tyr	
135	290 295 300	
136		
137	ACA GAA GTA GAG CTG TGC ACA AGA GGA TCG GGG TAC CAG TTC ATC CAT	960
138	Thr Glu Val Glu Leu Cys Thr Arg Gly Ser Gly Tyr Gln Phe Ile His	
139	305 310 315 320	
140		
141	GCT GCA GAC ATA CTT CAC TGT GCA GAA TCC CAC ATC CGC ATG ATT AAG	1008
142	Ala Ala Asp Ile Leu His Cys Ala Glu Ser His Ile Arg Met Ile Lys	
143	325 330 335	
144		
145	ACT GGA GAA AGT GGC ATG ACA GTT TTC CGG CTT CTT GCA AAA CAC AGT	1056
146	Thr Gly Glu Ser Gly Met Thr Val Phe Arg Leu Leu Ala Lys His Ser	
147	340 345 350	
148		
149	CGC TGG AGG TGG GTC CAG TCC AAT GCA CGC TTG ATT TAC AGA AAT GGA	1104
150	Arg Trp Arg Trp Val Gln Ser Asn Ala Arg Leu Ile Tyr Arg Asn Gly	
151	355 360 365	
152		

**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402**

DATE: 07/03/97
TIME: 19:11:22

INPUT SET: S18699.raw

153	AGA CCA GAT TAC ATC ATC GCC ACT CAG AGA CCA CTG ACG GAT GAA GAA	1152
154	Arg Pro Asp Tyr Ile Ile Ala Thr Gln Arg Pro Leu Thr Asp Glu Glu	
155	370 375 380	
156		
157	GGA CGA GAG CAT TTA CAG AAG CGA AGT ACG TCG CTG CCC TTC ATG TTT	1200
158	Gly Arg Glu His Leu Gln Lys Arg Ser Thr Ser Leu Pro Phe Met Phe	
159	385 390 395 400	
160		
161	GCT ACC GGA GAG GCT GTG TTG TAC GAG ATC TCC AGC CCT TTC TCT CCC	1248
162	Ala Thr Gly Glu Ala Val Leu Tyr Glu Ile Ser Ser Pro Phe Ser Pro	
163	405 410 415	
164		
165	ATA ATG GAT CCC CTA CCA ATA CGC ACC AAA AGC AAC ACT AGC AGG AAA	1296
166	Ile Met Asp Pro Leu Pro Ile Arg Thr Lys Ser Asn Thr Ser Arg Lys	
167	420 425 430	
168		
169	GAC TGG GCT CCC CAG TCA ACC CCA AGT AAG GAT TCT TTC CAC CCC AGT	1344
170	Asp Trp Ala Pro Gln Ser Thr Pro Ser Lys Asp Ser Phe His Pro Ser	
171	435 440 445	
172		
173	TCT CTT ATG AGT GCC CTC ATC CAG CAG GAT GAG TCC ATC TAT CTG TGT	1392
174	Ser Leu Met Ser Ala Leu Ile Gln Gln Asp Glu Ser Ile Tyr Leu Cys	
175	450 455 460	
176		
177	CCT CCT TCA AGC CCT GCG CTG TTA GAC AGC CAT TTT CTC ATG GGC TCC	1440
178	Pro Pro Ser Ser Pro Ala Leu Leu Asp Ser His Phe Leu Met Gly Ser	
179	465 470 475 480	
180		
181	GTG AGC AAG TGC GGG AGT TGG CAA GAC AGC TTT GCG GCC GCA GGA AGT	1488
182	Val Ser Lys Cys Gly Ser Trp Gln Asp Ser Phe Ala Ala Ala Gly Ser	
183	485 490 495	
184		
185	GAG GCT GCG CTG AAA CAT GAG CAA ATT GGC CAT GCT CAG GAC GTG AAC	1536
186	Glu Ala Ala Leu Lys His Glu Gln Ile Gly His Ala Gln Asp Val Asn	
187	500 505 510	
188		
189	CTT GCA CTC TCT GGC GGC CCC TCA GAG CTC TTT CCG GAT AAT AAA AAT	1584
190	Leu Ala Leu Ser Gly Gly Pro Ser Glu Leu Phe Pro Asp Asn Lys Asn	
191	515 520 525	
192		
193	AAT GAC TTG TAC AGC ATC ATG AGG AAC CTT GGG ATT GAT TTT GAA GAT	1632
194	Asn Asp Leu Tyr Ser Ile Met Arg Asn Leu Gly Ile Asp Phe Glu Asp	
195	530 535 540	
196		
197	ATC AGA AGC ATG CAG AAC GAG GAG TTC TTC AGA ACT GAC TCC ACC GCT	1680
198	Ile Arg Ser Met Gln Asn Glu Glu Phe Phe Arg Thr Asp Ser Thr Ala	
199	545 550 555 560	
200		
201	GCT GGT GAG GTT GAC TTC AAA GAC ATC GAC ATA ACG GAC GAA ATC CTG	1728 4
202	Ala Gly Glu Val Asp Phe Lys Asp Ile Asp Ile Thr Asp Glu Ile Leu	
203	565 570 575	
204		
205	ACC TAC GTG CAG GAT TCC CTG AAC AAT TCA ACT TTG CTG AAC TCG GCT	1776

**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402**

DATE: 07/03/97
TIME: 19:11:24

INPUT SET: S18699.raw

206	Thr Tyr Val Gln Asp Ser Leu Asn Asn Ser Thr Leu Leu Asn Ser Ala			
207	580	585	590	
208				
209	TGC CAG CAG CAG CCT GTG ACT CAG CAC CTA AGC TGT ATG CTG CAG GAG		1824	
210	Cys Gln Gln Gln Pro Val Thr Gln His Leu Ser Cys Met Leu Gln Glu			
211	595	600	605	
212				
213	CGC CTG CAA CTA GAG CAA CAG CAA CAG CTT CAG CAG CCC CCG CCG CAG		1872	
214	Arg Leu Gln Leu Glu Gln Gln Gln Leu Gln Gln Pro Pro Pro Gln			
215	610	615	620	
216				
217	GCT CTG GAG CCC CAG CAG CTG TGT CAG ATG GTG TGC CCC CAG CAA		1920	
218	Ala Leu Glu Pro Gln Gln Leu Cys Gln Met Val Cys Pro Gln Gln			
219	625	630	635	640
220				
221	GAT CTG GGT CCG AAG CAC ACG CAA ATC AAC GGC ACG TTT GCA AGT TGG		1968	
222	Asp Leu Gly Pro Lys His Thr Gln Ile Asn Gly Thr Phe Ala Ser Trp			
223	645	650	655	
224				
225	AAC CCC ACC CCT CCC GTG TCT TTC AAC TGT CCC CAG CAG GAA CTA AAG		2016	
226	Asn Pro Thr Pro Pro Val Ser Phe Asn Cys Pro Gln Gln Glu Leu Lys			
227	660	665	670	
228				
229	CAC TAT CAG CTC TTT TCC AGC TTA CAG GGG ACT GCT CAG GAA TTT CCC		2064	
230	His Tyr Gln Leu Phe Ser Ser Leu Gln Gly Thr Ala Gln Glu Phe Pro			
231	675	680	685	
232				
233	TAC AAA CCA GAG GTG GAC AGT GTG CCT TAC ACA CAG AAC TTT GCT CCC		2112	
234	Tyr Lys Pro Glu Val Asp Ser Val Pro Tyr Thr Gln Asn Phe Ala Pro			
235	690	695	700	
236				
237	TGT AAT CAG CCT CTG CTT CCA GAA CAT TCC AAG AGT GTG CAG TTG GAC		2160	
238	Cys Asn Gln Pro Leu Leu Pro Glu His Ser Lys Ser Val Gln Leu Asp			
239	705	710	715	720
240				
241	TTC CCT GGA AGG GAT TTT GAA CCG TCC CTG CAT CCC ACT ACT TCT AAT		2208	
242	Phe Pro Gly Arg Asp Phe Glu Pro Ser Leu His Pro Thr Thr Ser Asn			
243	725	730	735	
244				
245	TTA GAT TTT GTC AGT TGT TTA CAA GTT CCT GAA AAC CAA AGT CAT GGG		2256	
246	Leu Asp Phe Val Ser Cys Leu Gln Val Pro Glu Asn Gln Ser His Gly			
247	740	745	750	
248				
249	ATA AAC TCA CAG TCC GCC ATG GTC AGT CCT CAG GCA TAC TAT GCT GGG		2304	
250	Ile Asn Ser Gln Ser Ala Met Val Ser Pro Gln Ala Tyr Tyr Ala Gly			
251	755	760	765	
252				
253	GCC ATG TCC ATG TAT CAG TGC CAG CCA GGG CCA CAG CGC ACC CCT GTG		2352	
254	Ala Met Ser Met Tyr Gln Cys Gln Pro Gly Pro Gln Arg Thr Pro Val			
255	770	775	780	
256				
257	GAC CAG ACG CAG TAC AGC TCT GAA ATT CCA GGT TCT CAG GCA TTC CTA		2400	
258	Asp Gln Thr Gln Tyr Ser Ser Glu Ile Pro Gly Ser Gln Ala Phe Leu			

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION **US/08/855,402**

DATE: 07/03/97
TIME: 19:11:27

INPUT SET: S18699.raw

Line	Error	Original Text
29	Wrong application Serial Number	(A) APPLICATION NUMBER: US

**RAW SEQUENCE LISTING
PATENT APPLICATION US/08/855,402**

DATE: 06/30/97
TIME: 14:18:32

INPUT SET: S18699.raw

43 (2) INFORMATION FOR SEQ ID NO:1:

44

45 (i) SEQUENCE CHARACTERISTICS:

46

(A) LENGTH: 3207 base pairs

47

(B) TYPE: nucleic acid

48

(C) STRANDEDNESS: double

49

(D) TOPOLOGY: unknown

50

51 (ii) MOLECULE TYPE: cDNA

52

53

54 (ix) FEATURE:

55

(A) NAME/KEY: CDS

56

(B) LOCATION: 1..2415

57

58

59 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

60

61 ATG AGC AGC GGC GCC AAC ATC ACC TAT GCC AGC CGC AAG CGG CGC

48

62 AAG

48

63 Met Ser Ser Gly Ala Asn Ile Thr Tyr Ala Ser Arg Lys Arg Arg Lys

64 1

5

10

15

65

66 CCG GTG CAG AAA ACA GTA AAG CCC ATC CCC GCT GAA GGA ATT AAG

96

67 TCA

96

68 Pro Val Gln Lys Thr Val Lys Pro Ile Pro Ala Glu Gly Ile Lys Ser

69 20

25

30

Lete

70

71 AAT CCT TCT AAG CGA CAC AGA GAC CGG CTG AAC ACA GAG TTA GAC

72 CGC

144

73 Asn Pro Ser Lys Arg His Arg Asp Arg Leu Asn Thr Glu Leu Asp Arg

74 35

40

45

75

76 CTG GCC AGC CTG CTG CCC TTC CCG CAA GAT GTT ATT AAT AAG CTG GAC

77 192

78 Leu Ala Ser Leu Leu Pro Phe Pro Gln Asp Val Ile Asn Lys Leu Asp

79 50

55

60

80

81 AAA CTC TCT GTT CTT AGG CTC AGC GTC ACG TAC CTG AGG GCC AAG AGC

82 240

83 Lys Leu Ser Val Leu Arg Leu Ser Val Thr Tyr Leu Arg Ala Lys Ser

84 65

70

75

80

85

86 TTC TTT GAT GTT GCA TTA AAG TCC ACC CCT GCT GAC AGA AAT GGA GGC

87 288

88 Phe Phe Asp Val Ala Leu Lys Ser Thr Pro Ala Asp Arg Asn Gly Gly

89 85

90

95

90

91 CAG GAC CAG TGT AGA GCA CAA ATC AGA GAC TGG CAG GAT TTG CAA

4

92 GAA

336

93 Gln Asp Gln Cys Arg Ala Gln Ile Arg Asp Trp Gln Asp Leu Gln Glu

94 100

105

110

95

(Appearing throughout)

Sample of

format now